



**Observing a 2012  
chlorophyll intrusion from  
Greenwich Bay to Ohio Ledge**

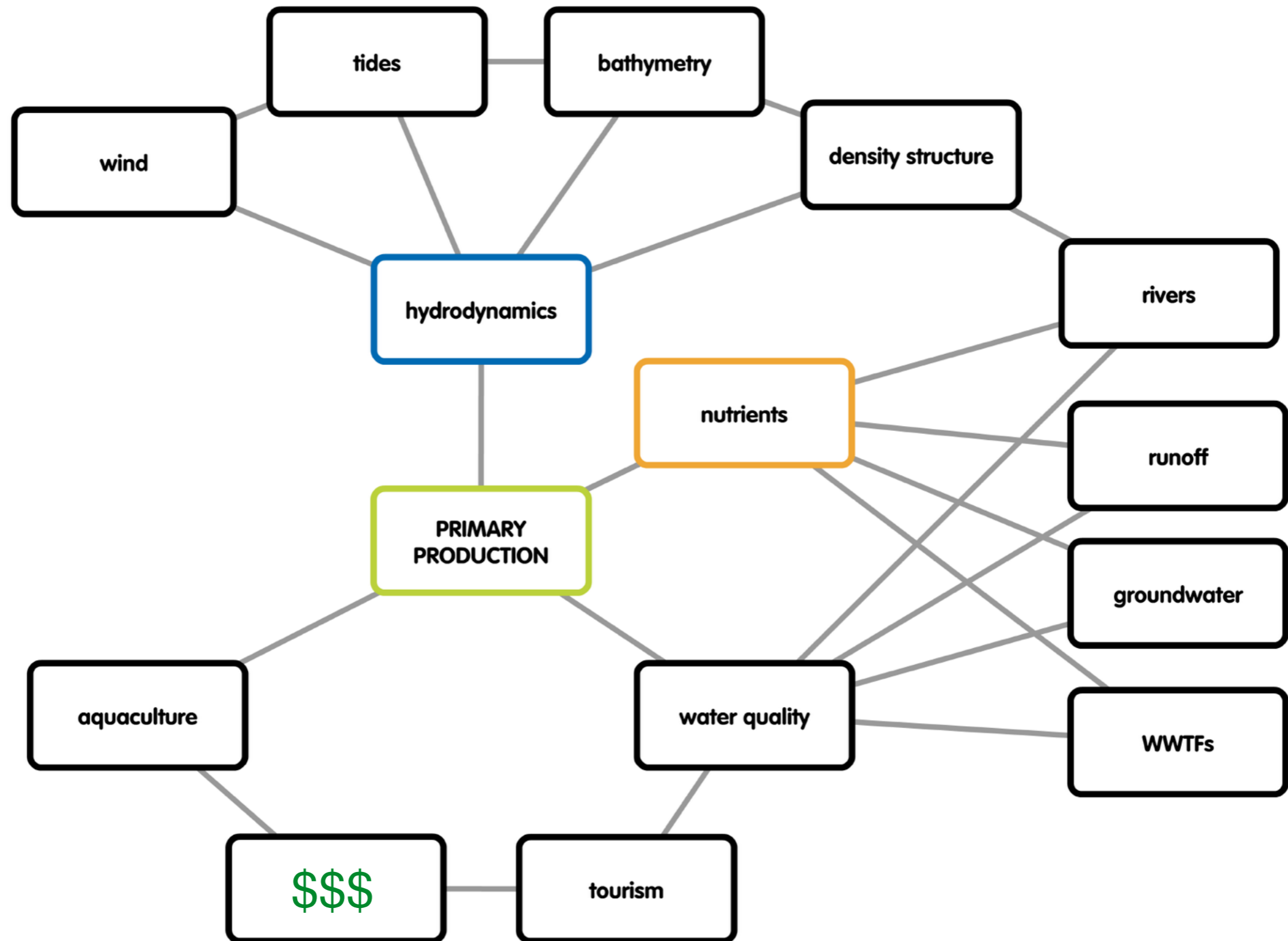
**Kevin Rosa  
URI GSO - Kincaid Lab**



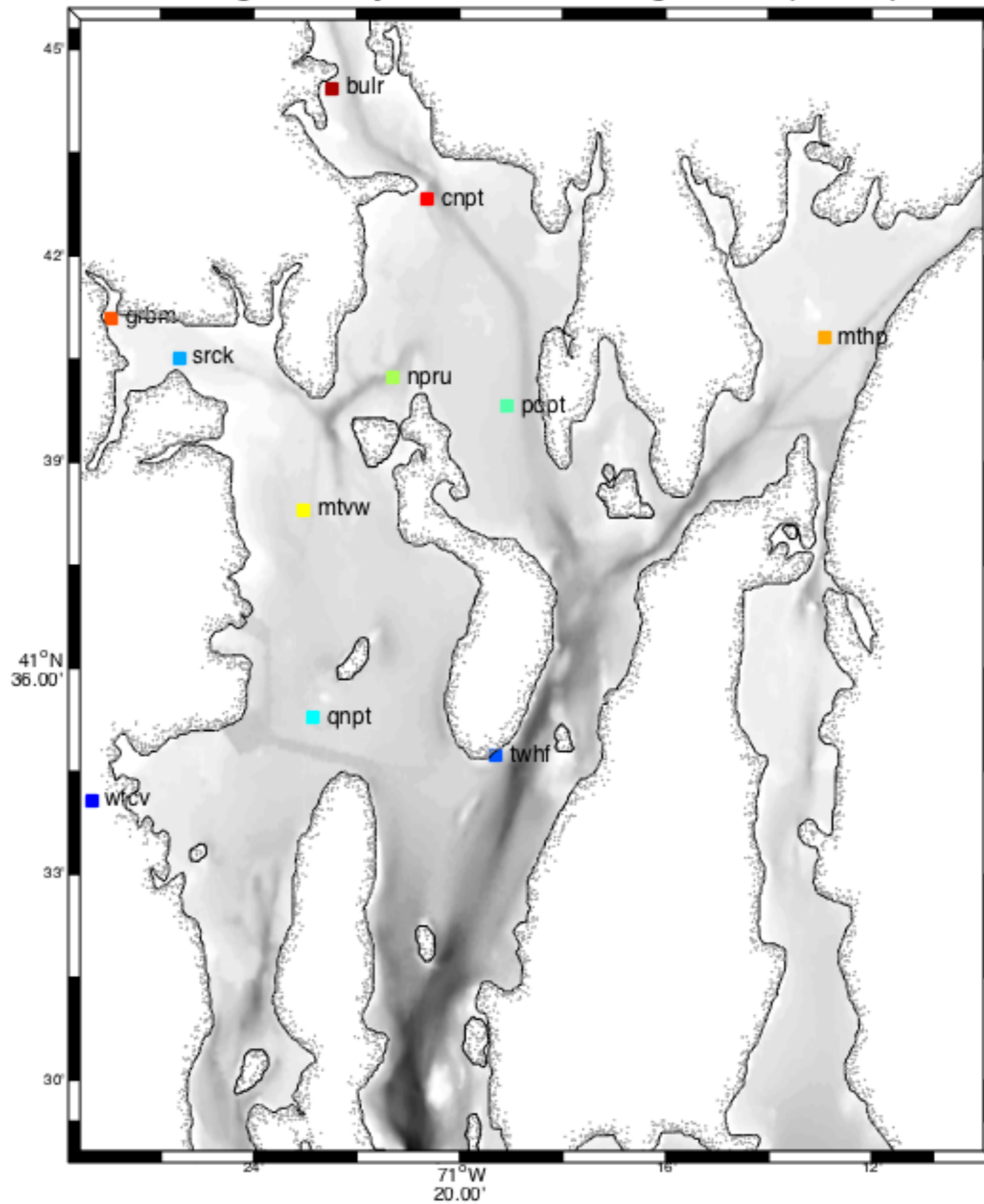
Broader goals...

**Connecting bio-chemical data with physics**  
to advance understanding of the  
interconnected processes governing the  
health of Narragansett Bay.

# The need for a multi-disciplinary approach

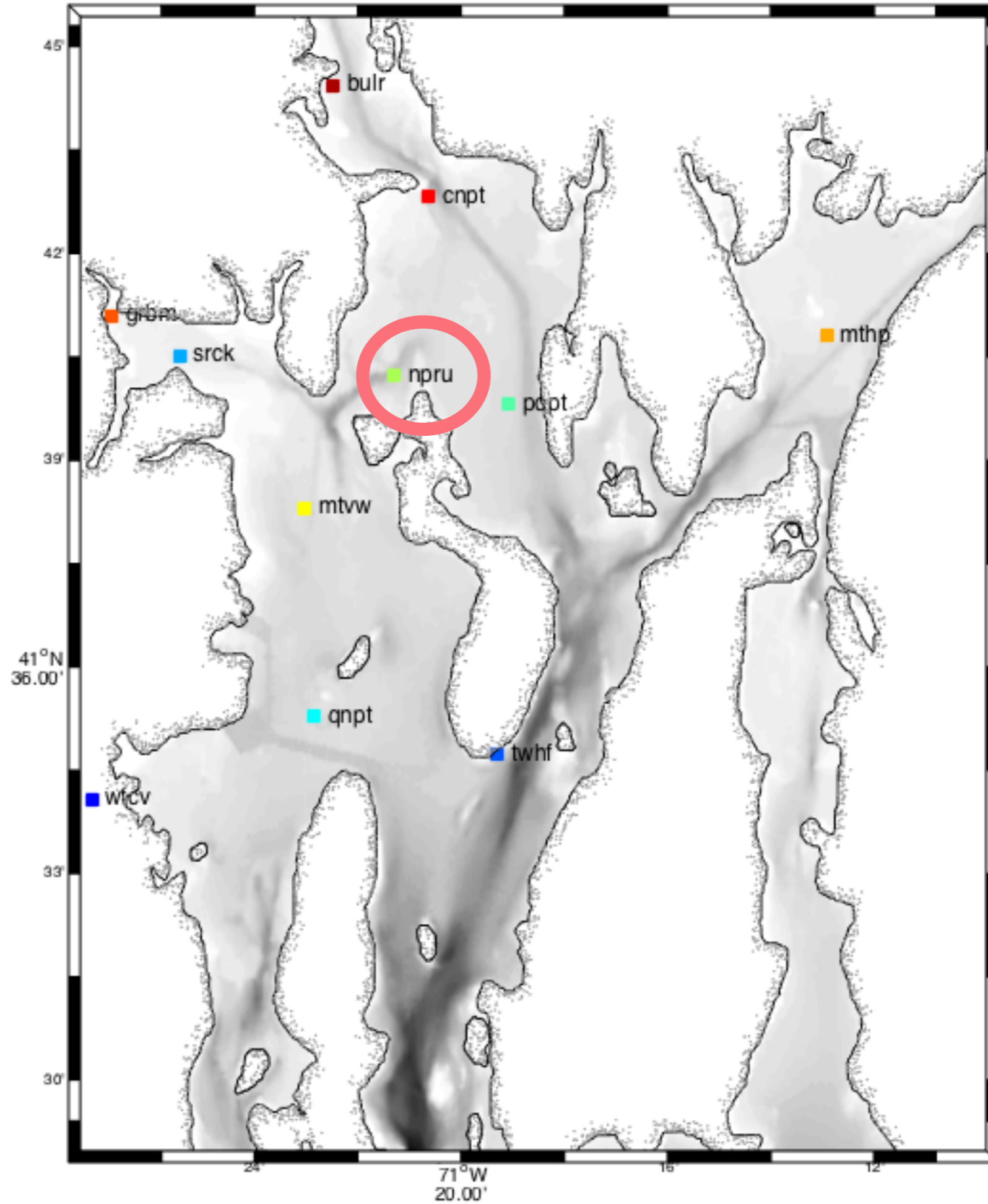


# Narragansett Bay Fixed-Site Monitoring Network (NFSMN)



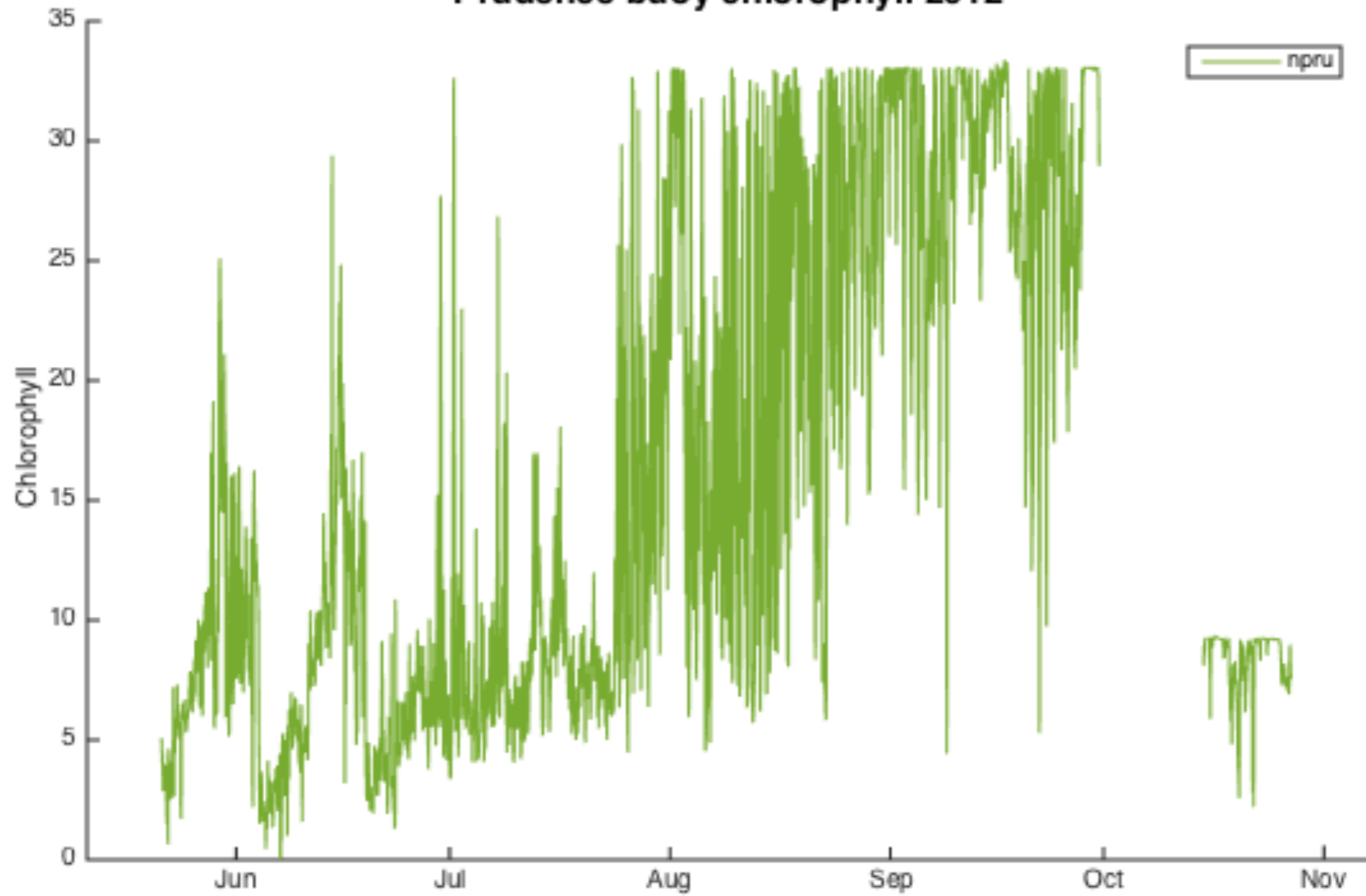


# Narragansett Bay Fixed-Site Monitoring Network (NFSMN)



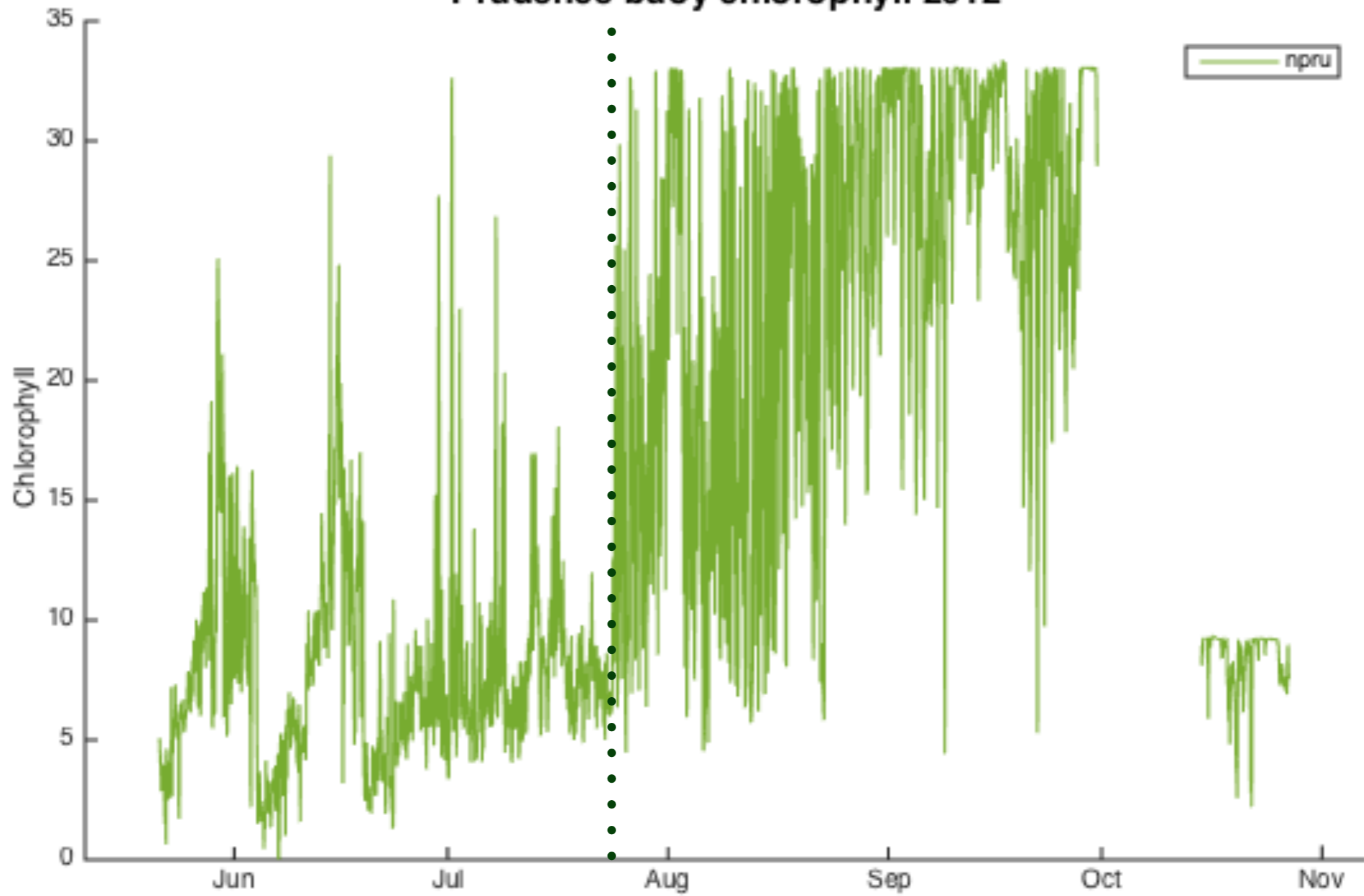


### Prudence buoy chlorophyll 2012



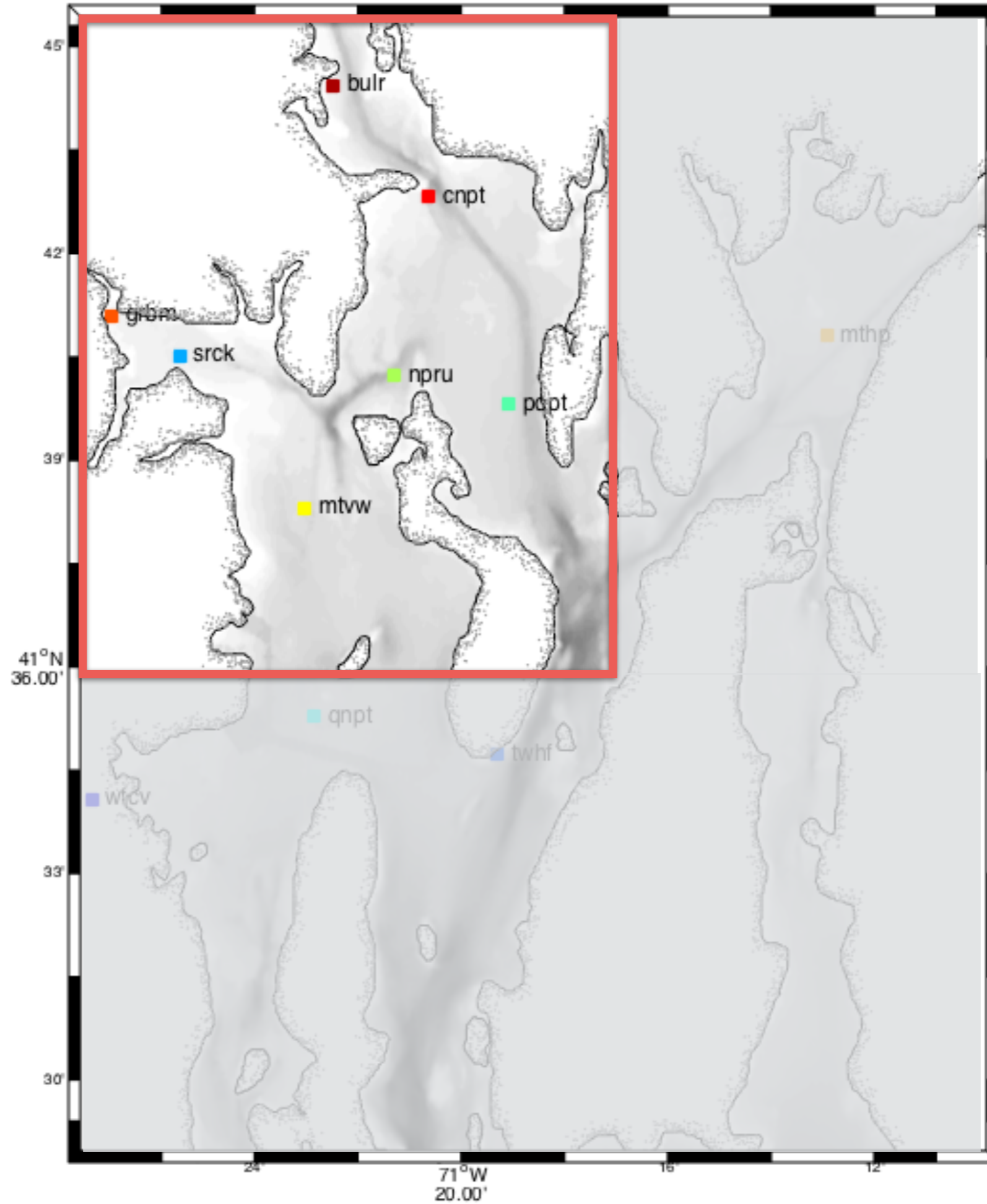


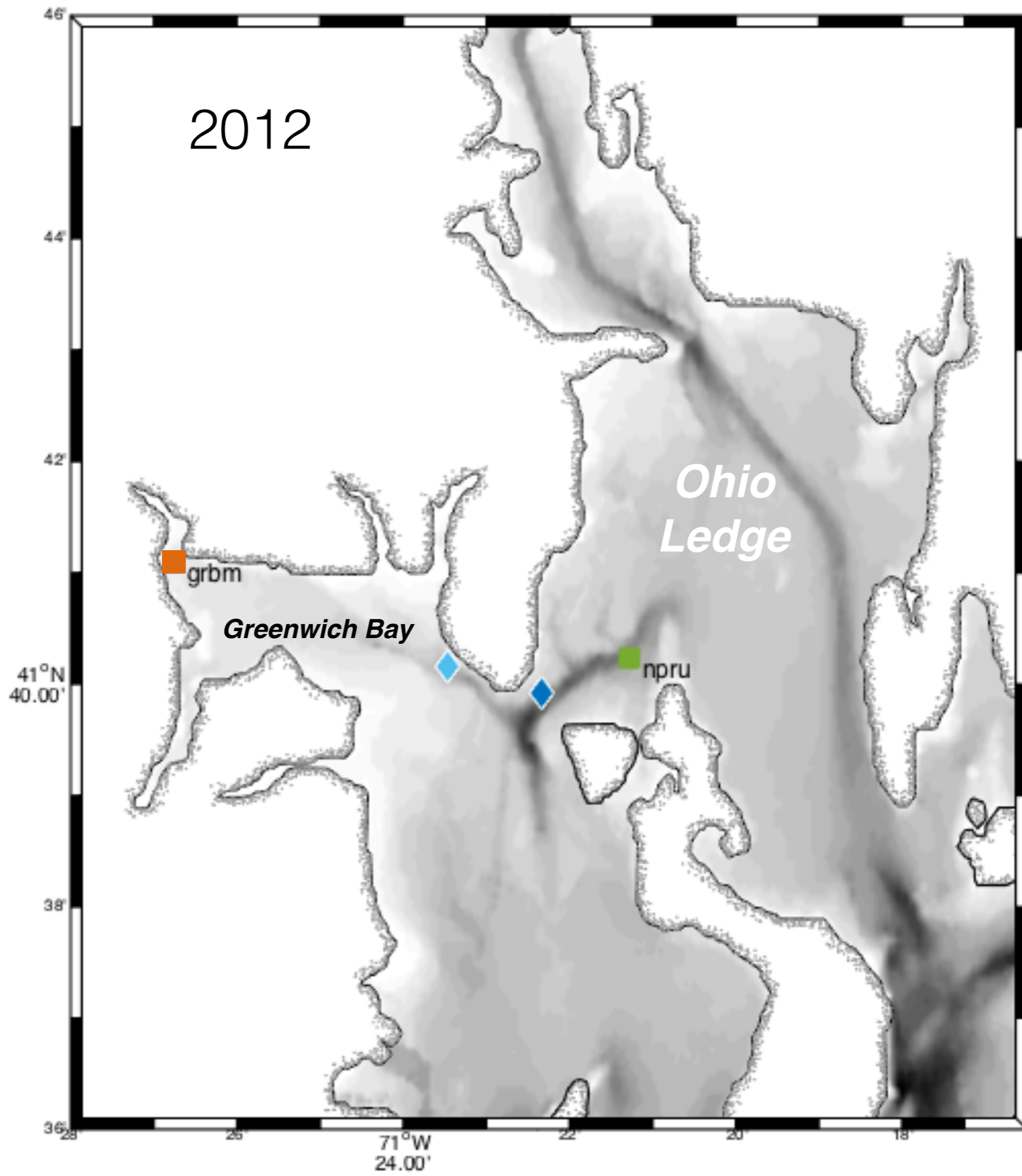
Prudence buoy chlorophyll 2012





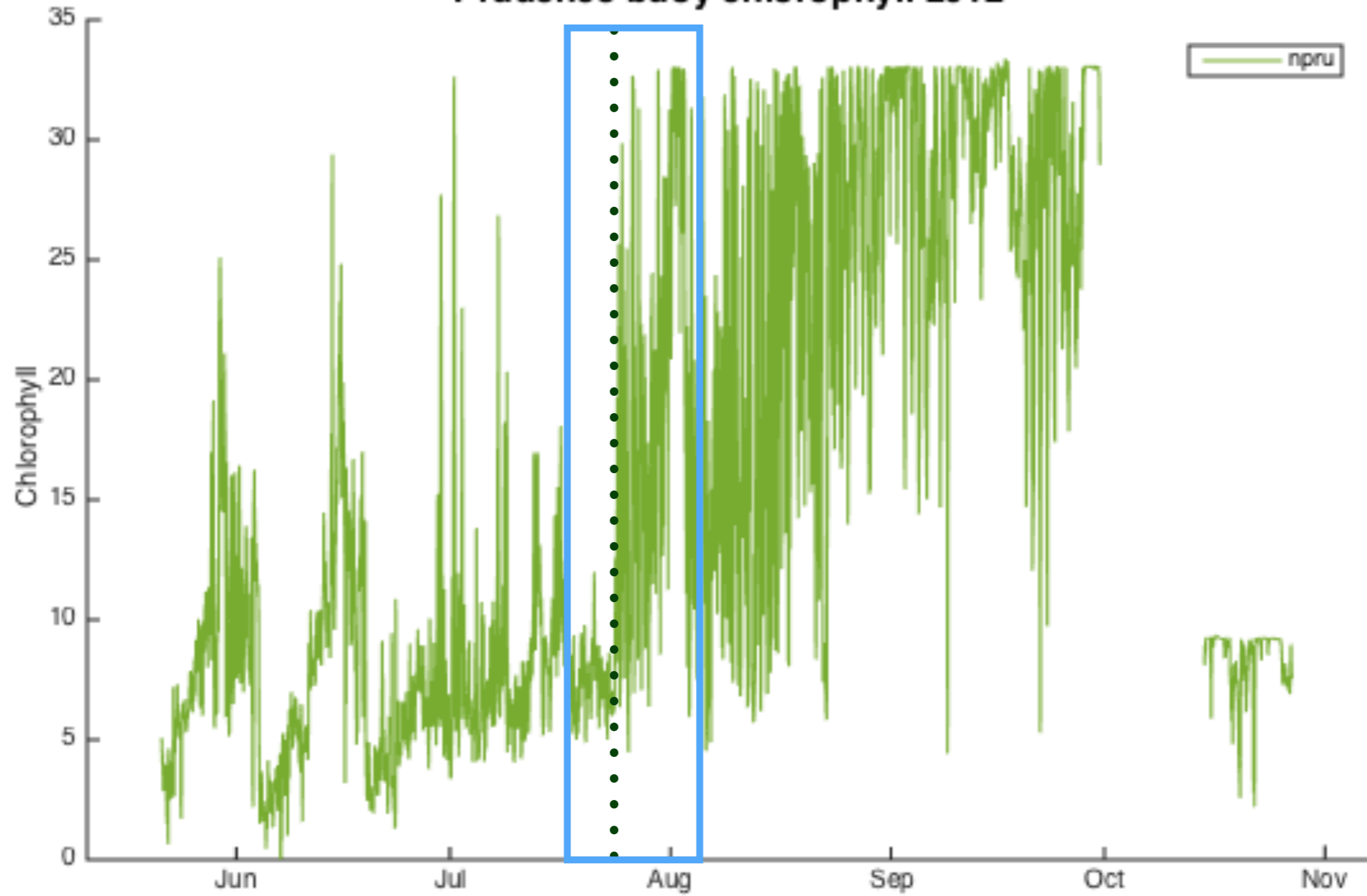
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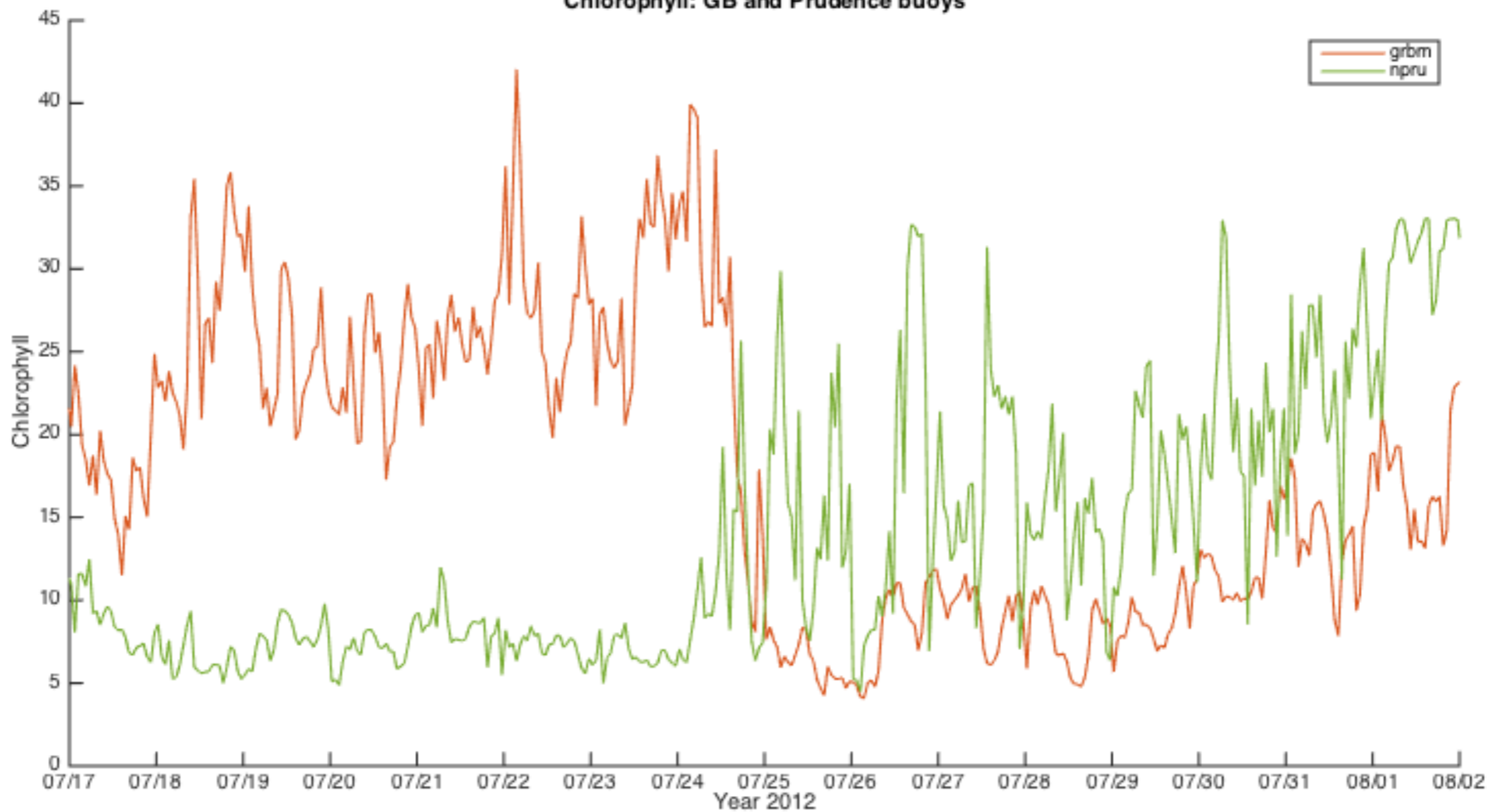




Prudence buoy chlorophyll 2012

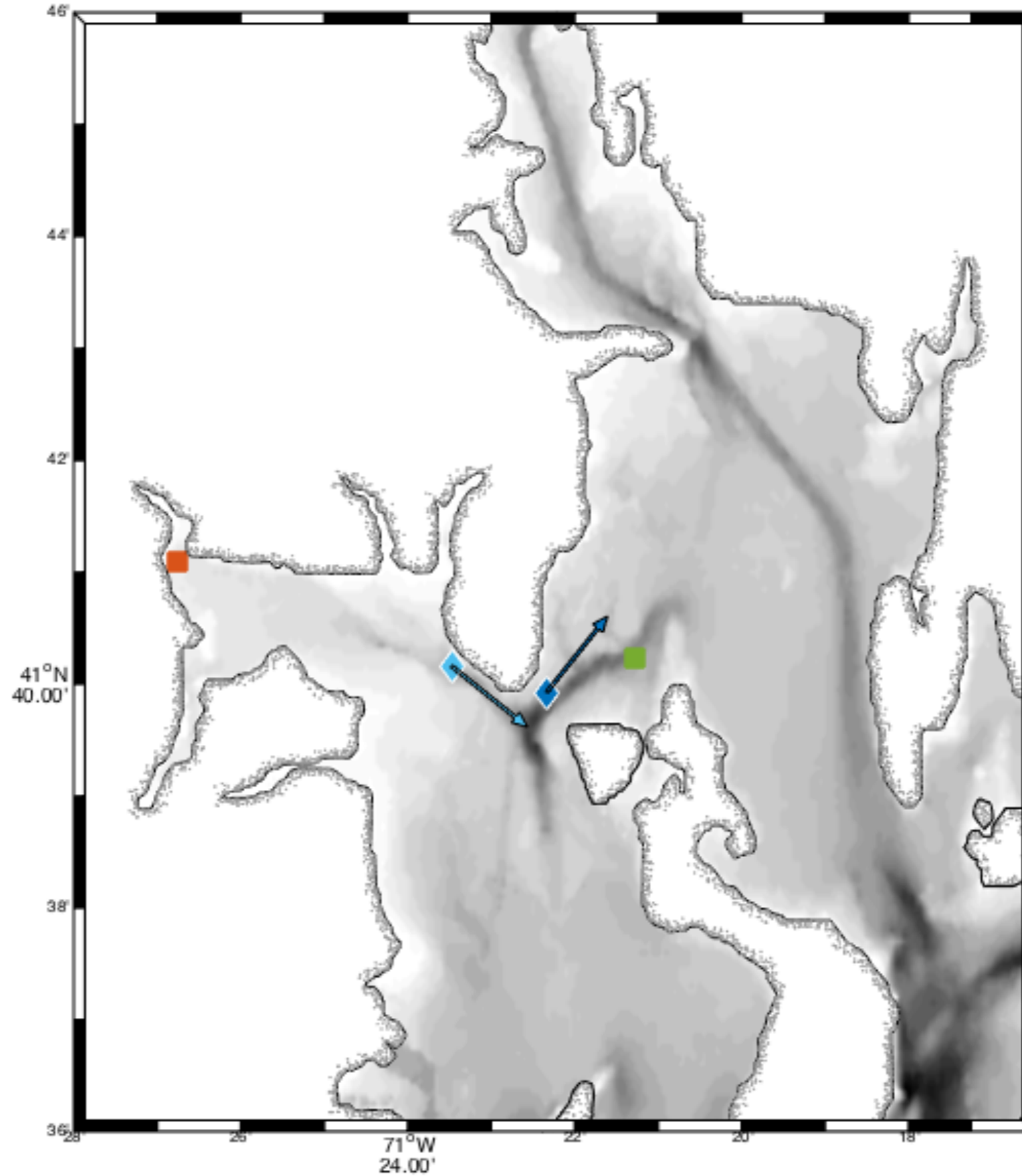


Chlorophyll: GB and Prudence buoys

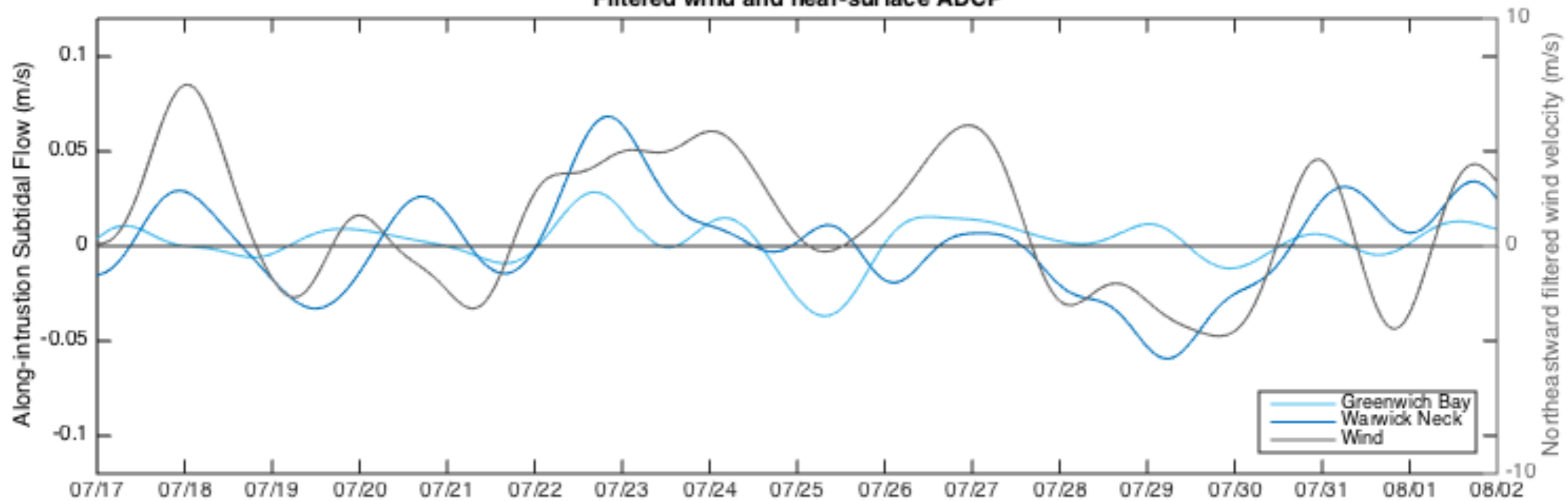




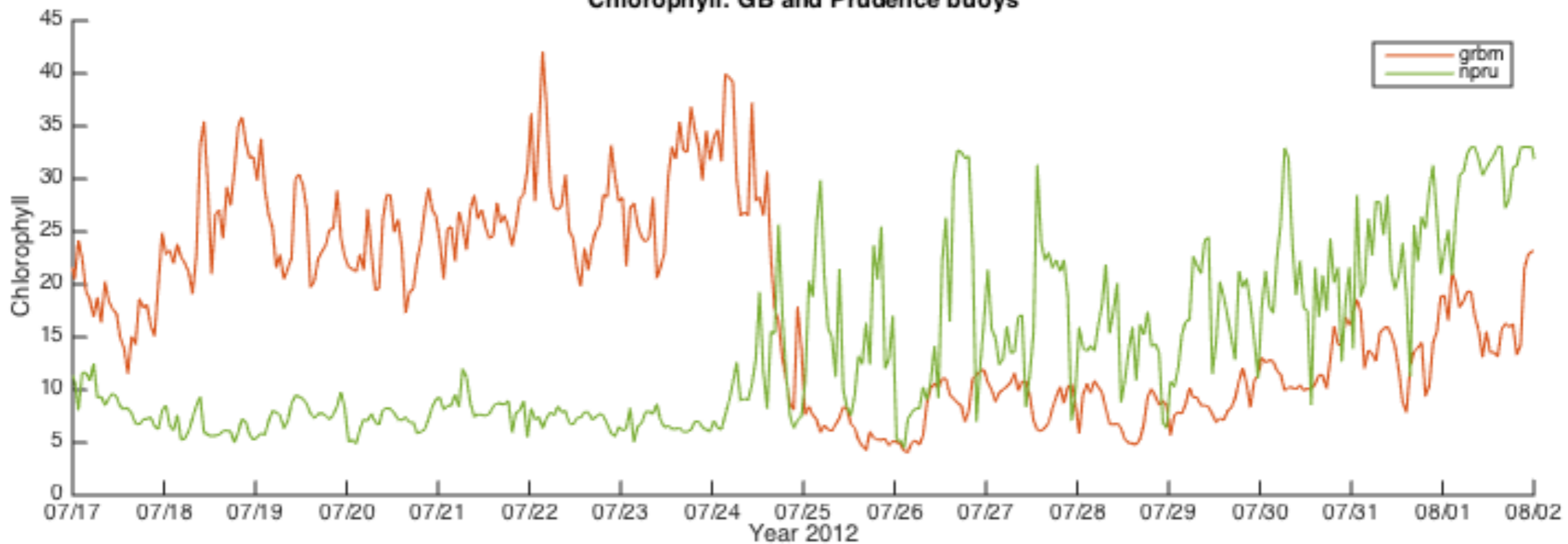
# Defining GBtOL-Intrusion Coordinates



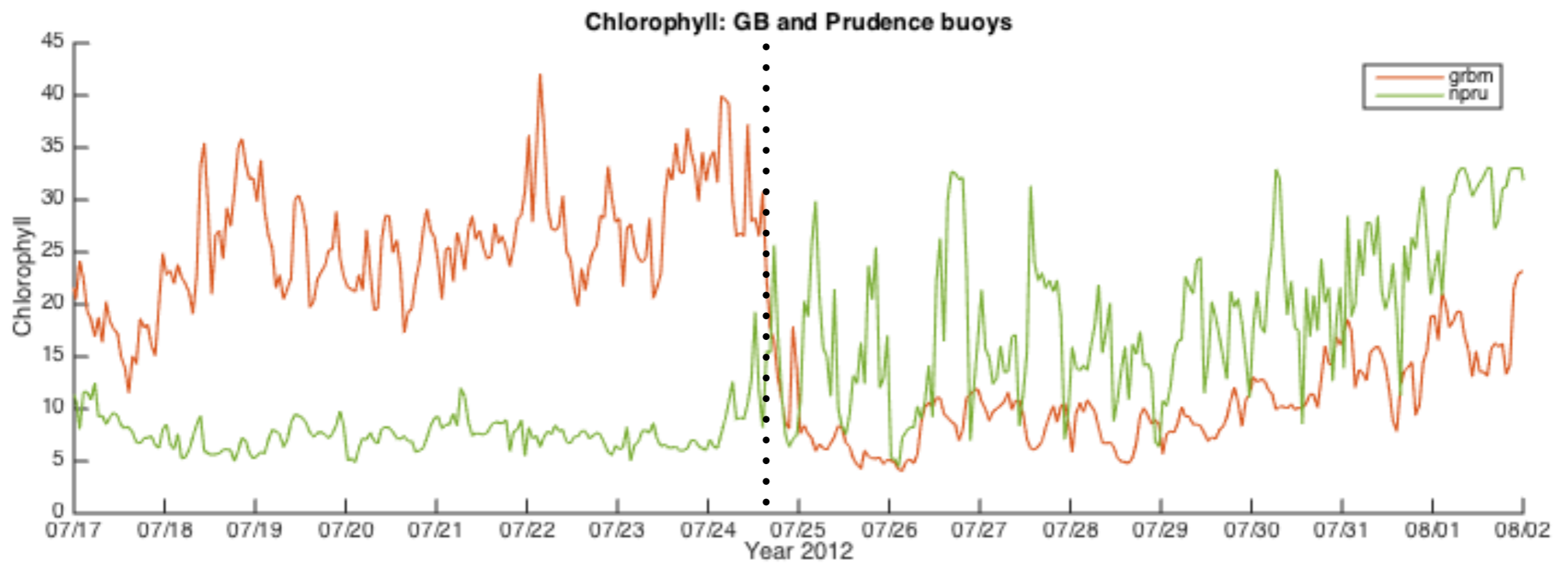
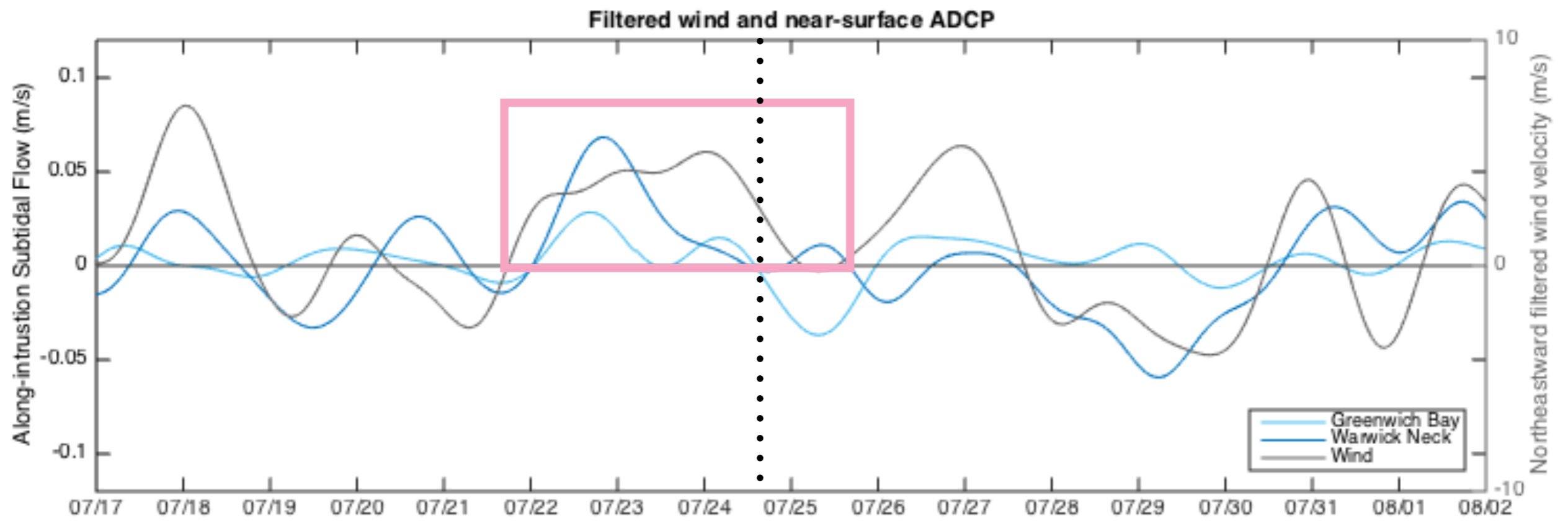
Filtered wind and near-surface ADCP



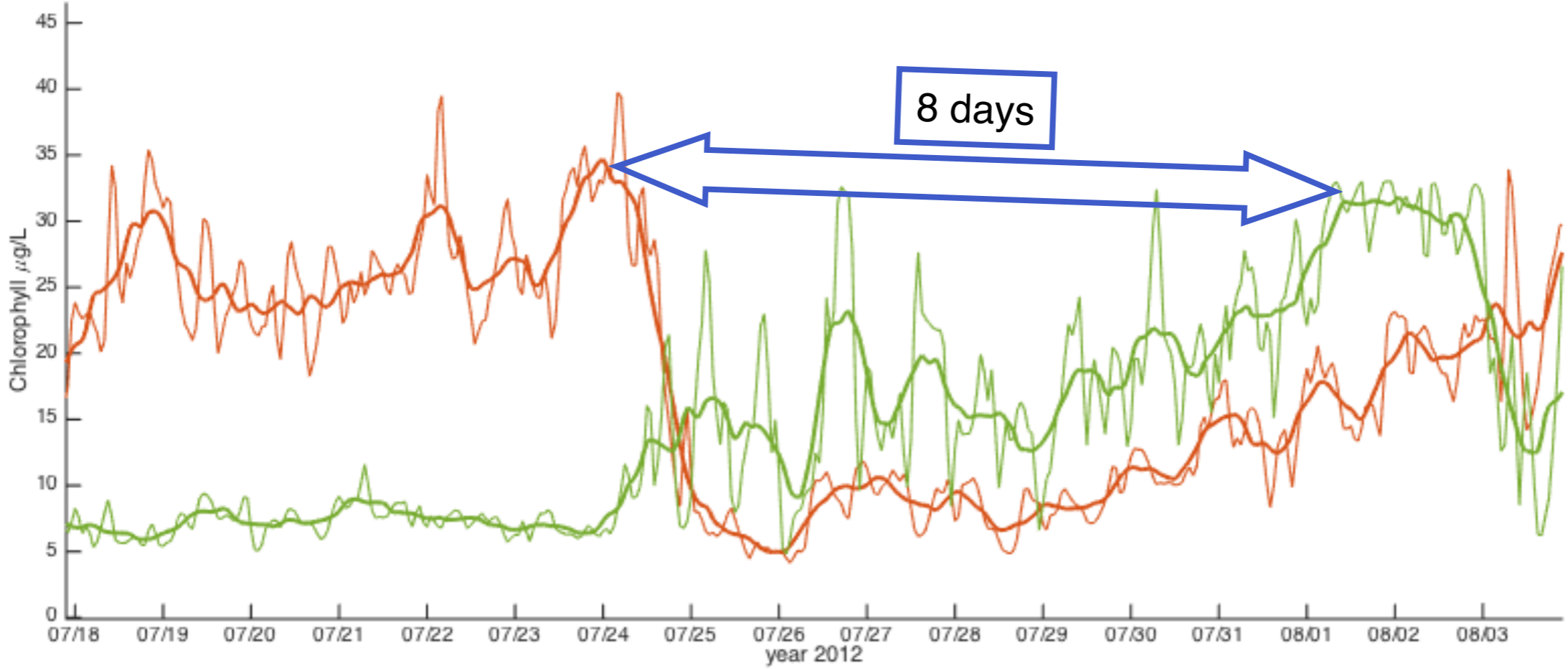
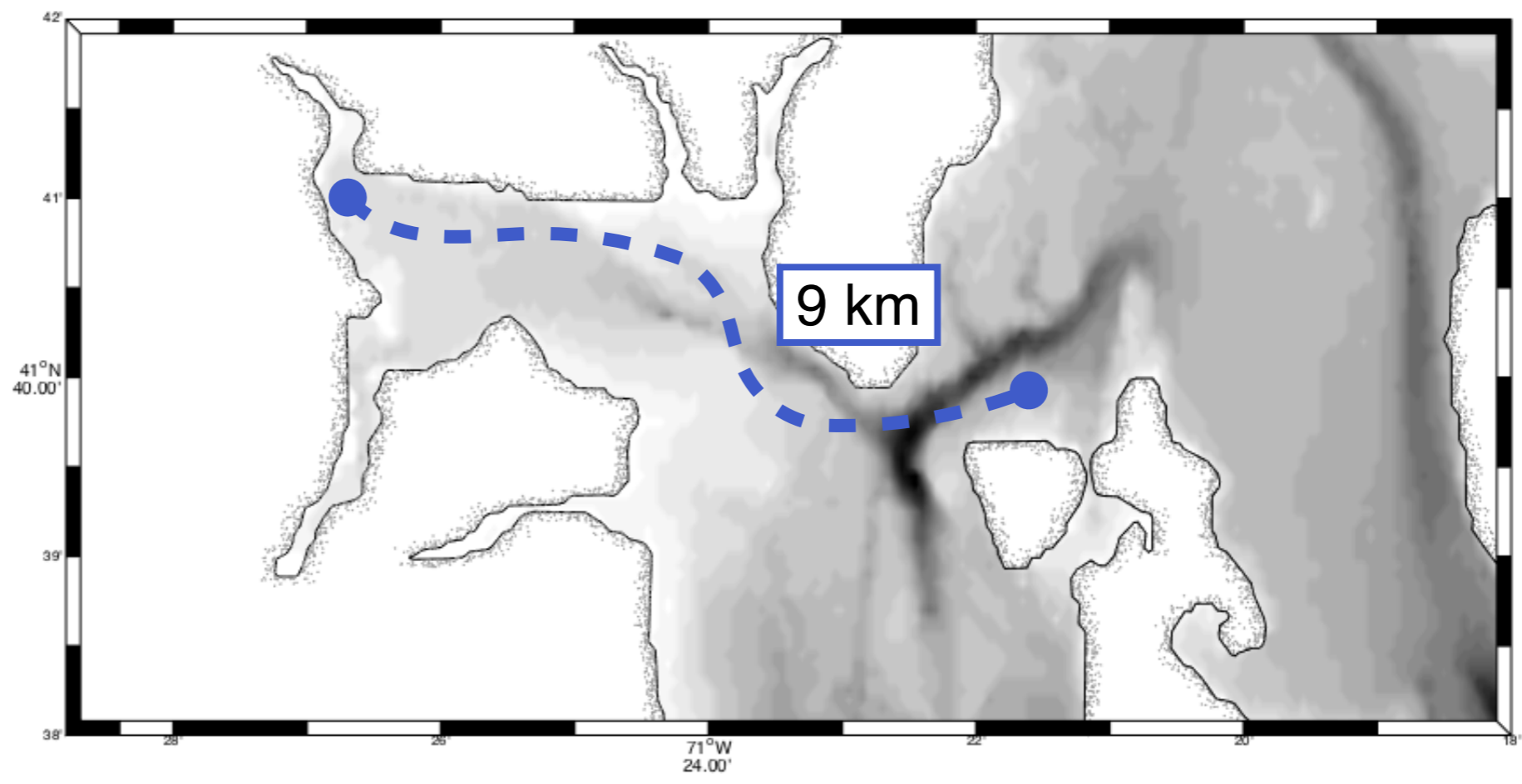
Chlorophyll: GB and Prudence buoys

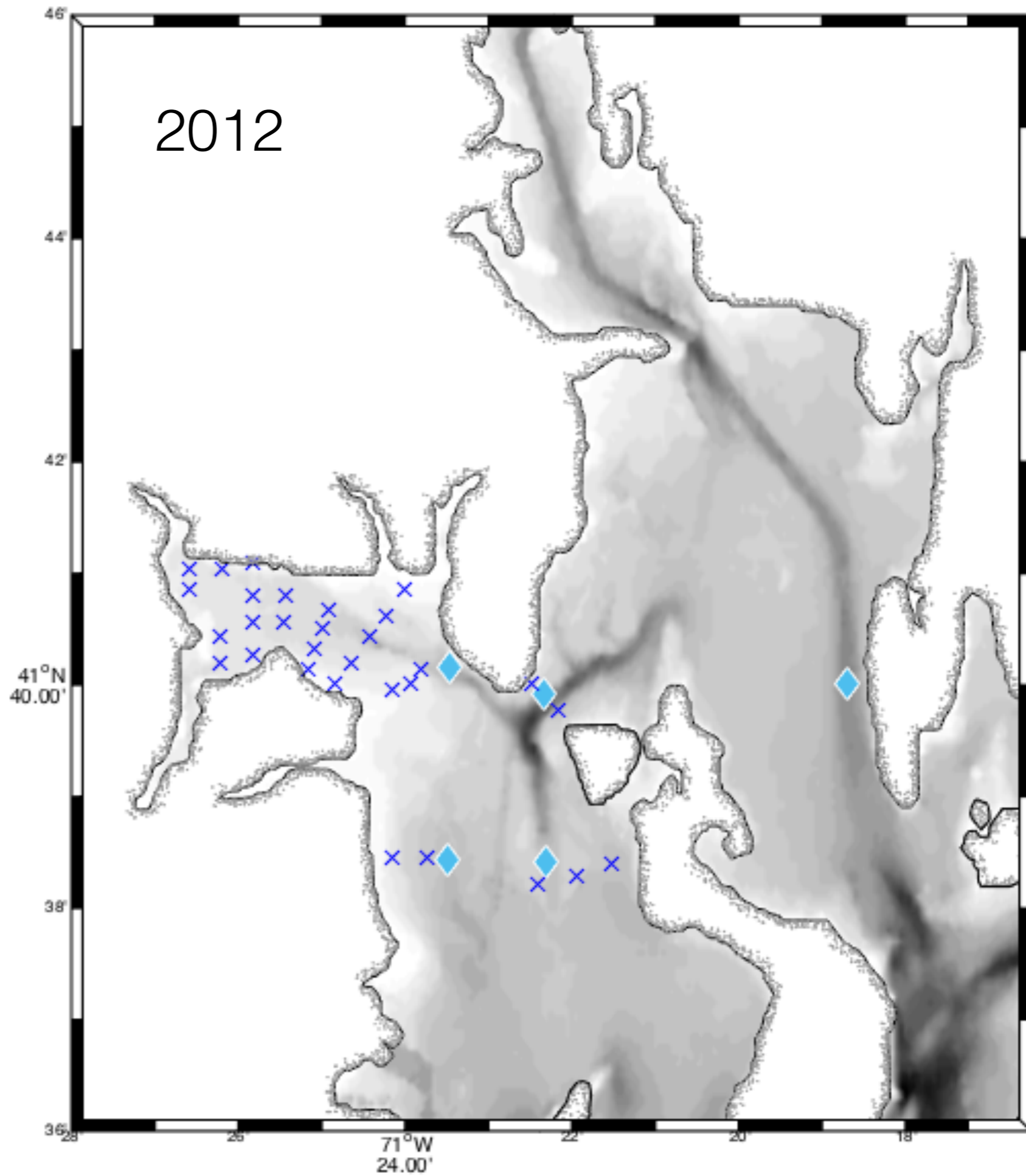
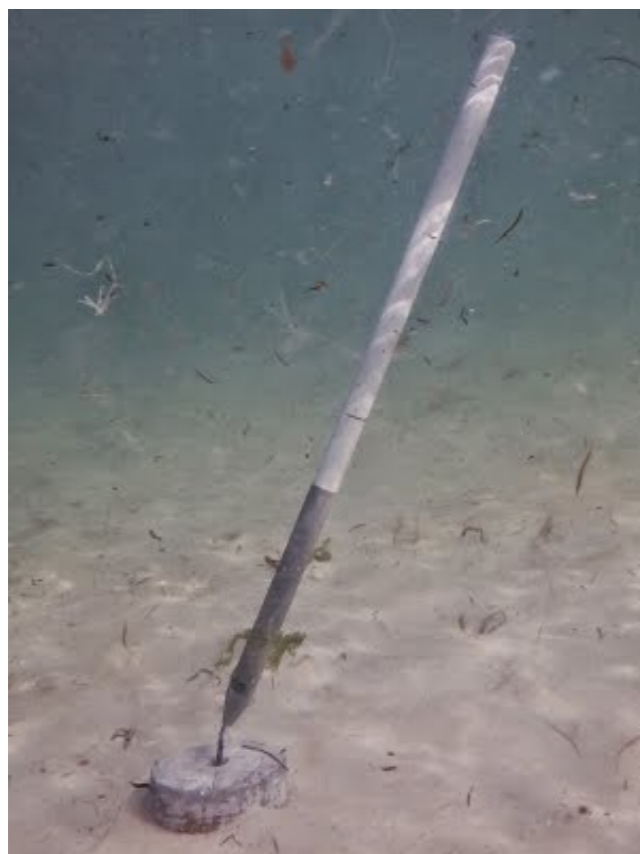
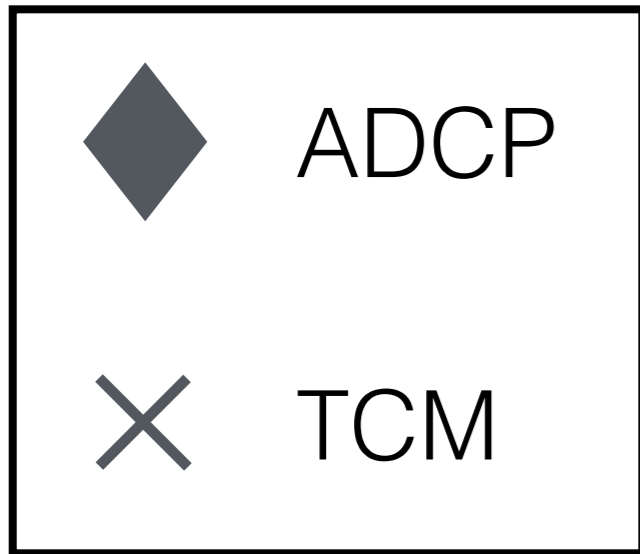




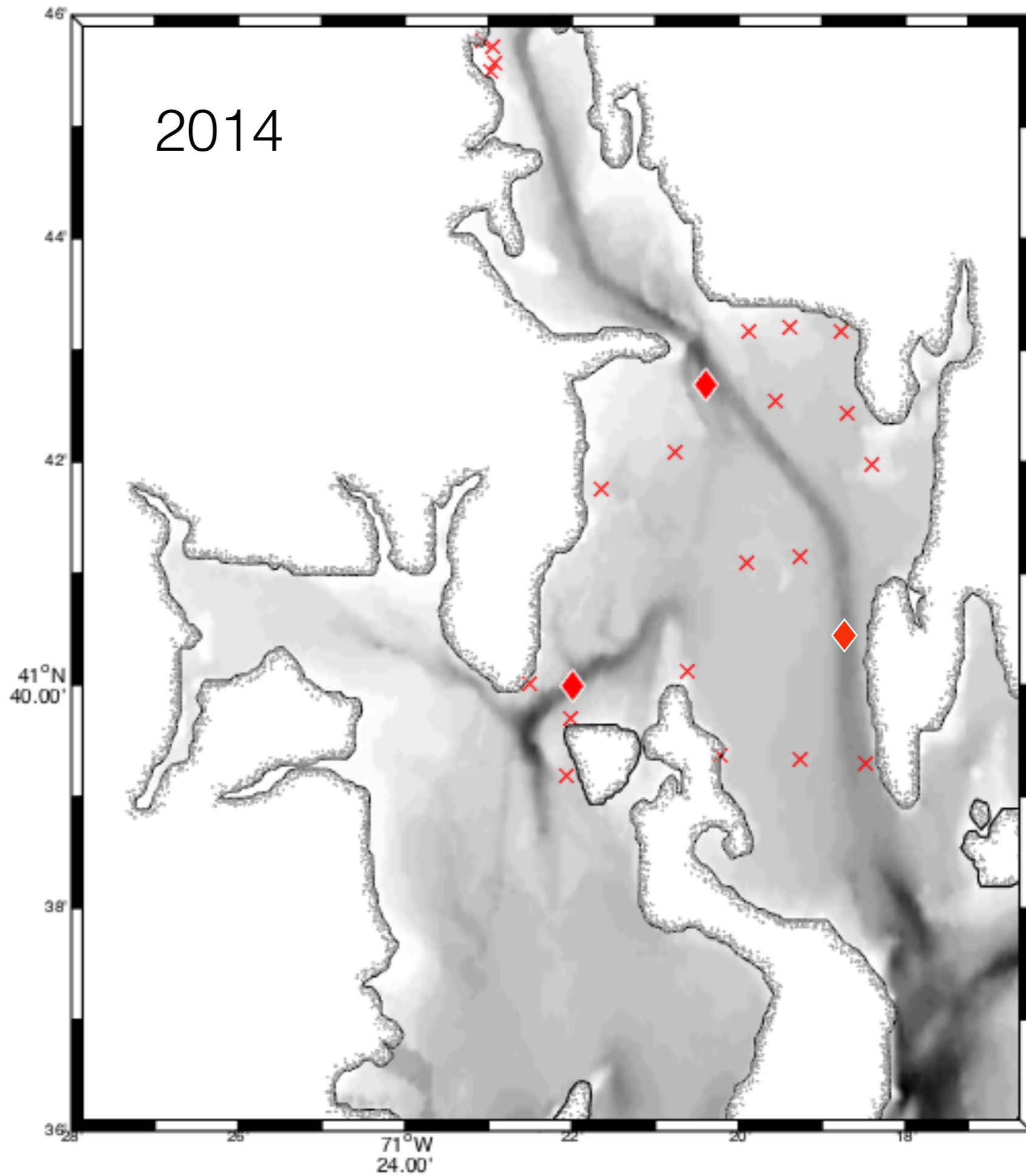
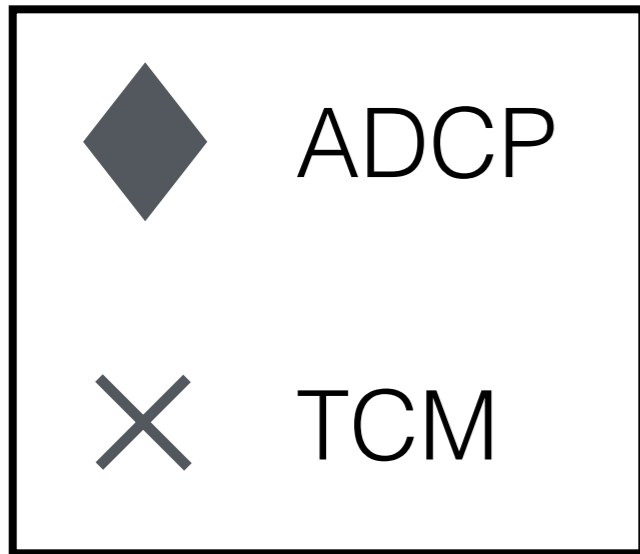


# Time and Length Scales









# Future directions

- seek hydrodynamic data for historically significant events (e.g. August 2003 fish kill).
- look at other NBFSMN measurements: dissolved oxygen, temperature, and salinity.
- compare with ROMS model results.
- actually write my thesis....



(picture of an ADCP in its housing)

